

Publications

2021

Floutsi, A. A., Baars, H., Radenz, M., Haarig, M., Yin, Z., Seifert, P., Jimenez, C., Ansmann, A., Engelmann, R., Barja, B., Zamorano, F., Wandinger, U.

Advection of biomass burning aerosols towards the southern hemispheric mid-latitude station of Punta Arenas as observed with multiwavelength polarization Raman lidar

Remote Sens., **13**, 138 p.

doi:10.3390/rs13010138

Mylonaki, M., Giannakaki, E., Papayannis, A., Papanikolaou, C.-A., Komppula, M., Nicolae, D., Papagiannopoulos, N., Amodeo, A., Baars, H., Soupiona, O.

Aerosol type classification analysis using EARLINET multiwavelength and depolarization lidar observations

Atmos. Chem. Phys., **21**, 2211-2227 p.

doi:10.5194/acp-21-2211-2021

Rogozovsky, I., Ansmann, A., Althausen, D., Heese, B., Engelmann, R., Hofer, J., Baars, H., Schechner, Y., Lyapustin, A., Chudnovsky, A.

Impact of aerosol layering, complex aerosol mixing, and cloud coverage on high-resolution MAIAC aerosol optical depth measurements: Fusion of lidar, AERONET, satellite, and ground-based measurements

Atmos. Environ., **247**, 118163 p., ISBN: 1352-2310

doi:10.1016/j.atmosenv.2020.118163

2020

Genz, C., Schrödner, R., Heinold, B., Henning, S., Baars, H., Spindler, G., Tegen, I.

Estimation of cloud condensation nuclei number concentrations and comparison to in situ and lidar observations during the HOPE experiments

Atmos. Chem. Phys., **20**, 8787-8806 p.

doi:10.5194/acp-20-8787-2020

Hofer, J.

Aerosol characterization over a Central Asian site: Long-term lidar profiling at Dushanbe, Tajikistan (March 2015 - August 2016)

Ph. D., University of Leipzig, Faculty of Physics and Earth Sciences, 91 pp.

Hofer, J., Ansmann, A., Althausen, D., Engelmann, R., Baars, H., Fomba, K. W., Wandinger, U., Abdullaev, S. F., Makhmudov, A. N.

Optical properties of Central Asian aerosol relevant for spaceborne lidar applications and aerosol typing at 355 and 532 nm

Atmos. Chem. Phys., **20**, 9265-9280 p.

doi:10.5194/acp-20-9265-2020

Jimenez, C., Ansmann, A., Engelmann, R., Donovan, D., Malinka, A., Seifert, P., Wiesen, R., Radenz, M., Yin, Z., Bühl, J., Schmidt, J., Barja, B., Wandinger, U.

The dual-field-of-view polarization lidar technique: A new concept in monitoring aerosol effects in liquid-water clouds – case studies

Atmos. Chem. Phys., **20**, 15265-15284 p.

doi:10.5194/acp-20-15265-2020

Jimenez, C., Ansmann, A., Engelmann, R., Donovan, D., Malinka, A., Schmidt, J., Seifert, P., Wandinger, U.

The dual-field-of-view polarization lidar technique: A new concept in monitoring aerosol effects in liquid-water clouds – theoretical framework

Atmos. Chem. Phys., **20**, 15247-15263 p.

doi:10.5194/acp-20-15247-2020

Ohneiser, K., Ansmann, A., Baars, H., Seifert, P., Barja, B., Jimenez, C., Radenz, M., Teisseire, A., Floutsi, A., Haarig, M., Foth, A., Chudnovsky, A., Engelmann, R., Zamorano, F., Bühl, J., Wandinger, U.

Smoke of extreme Australian bushfires observed in the stratosphere over Punta Arenas, Chile, in January 2020: Optical thickness, lidar ratios, and depolarization ratios at 355 and 532 nm

Atmos. Chem. Phys., **20**, 8003-80015 p.

doi:10.5194/acp-20-8003-2020

2019

Ansmann, A., Mamouri, R.-E., Hofer, J., Baars, H., Althausen, D., Abdullaev, S. F.

Dust mass, cloud condensation nuclei, and ice-nucleating particle profiling with polarization lidar: Updated POLIPHON conversion factors from global AERONET analysis

Atmos. Meas. Tech., **12**, 4849-4865 p.

doi:10.5194/amt-12-4849-2019

Bühl, J., Seifert, P., Radenz, M., Baars, H., Ansmann, A.

Ice crystal number concentration from lidar, cloud radar and radar wind profiler measurements

Atmos. Meas. Tech., **12**, 6601–6617 p.

doi:10.5194/amt-12-6601-2019

Foth, A., Kanitz, T., Engelmann, R., Baars, H., Radenz, M., Seifert, P., Barja, B., Fromm, M., Kalesse, H., Ansmann, A.

Vertical aerosol distribution in the southern hemispheric midlatitudes as observed with lidar in Punta Arenas, Chile (53.2° S and 70.9° W), during ALPACA

Atmos. Chem. Phys., **19**, 6217-6233 p.

doi:10.5194/acp-19-6217-2019

Haarig, M., Walser, A., Ansmann, A., Dollner, M., Althausen, D., Sauer, D., Farrell, D., Weinzierl, B.

Profiles of cloud condensation nuclei, dust mass concentration, and ice-nucleating-particle-relevant aerosol properties in the Saharan Air Layer over Barbados from polarization lidar and airborne in situ measurements

Atmos. Chem. Phys., **19**, 13773–13788 p.

doi:10.5194/acp-19-13773-2019

Jimenez, C., Ansmann, A., Engelmann, R., Haarig, M., Schmidt, J., Wandinger, U.

Polarization lidar: An extended three-signal calibration approach

Atmos. Meas. Tech., **12**, 1077-1093 p.

doi:10.5194/amt-12-1077-2019

Marinou, E., Tesche, M., Nenes, A., Ansmann, A., Schrod, J., Mamali, D., Tsekeri, A., Pikridas, M., Baars, H., Engelmann, R., Voudouri, K.-A., Solomos, S., Sciare, J., Groß, S., Ewald, F., Amiridis, V.

Retrieval of ice-nucleating particle concentrations from lidar observations and comparison with UAV in situ measurements

Atmos. Chem. Phys., **19**, 11315-11342 p.

doi:10.5194/acp-19-11315-2019

Ohneiser, K.

Relationship between aerosol properties and characteristics of supercooled clouds using lidar

Schechner, Y., Althausen, D.

3D widefield sky scatterer tomography by lidar anchor (Scientific Report)

Report, German-Israeli Foundation for Scientific Research and Development (GIF), 12, ISBN: GIF Grant No: I-1262-401.10/2014

Tesche, M., Kolgotin, A., Haarig, M., Burton, S. P., Ferrare, R. A., Hostetler, C. A., Müller, D.

3+2 + X: what is the most useful depolarization input for retrieving microphysical properties of non-spherical particles from lidar measurements using the spheroid model of Dubovik et al. (2006)?

Atmos. Meas. Tech., **12**, 4421-4437 p.

doi:10.5194/amt-12-4421-2019

Yin, Z., Ansmann, A., Baars, H., Seifert, P., Engelmann, R., Radenz, M., Jimenez, C., Herzog, A., Ohneiser, K., Hanbuch, K., Blarel, L., Goloub, P., Dubois, G., Victori, S., Mauping, F.

Aerosol measurements with a shipborne Sun-sky-lunar photometer and collocated multiwavelength Raman polarization lidar over the Atlantic Ocean

Atmos. Meas. Tech., **12**, 5685-5698 p.

doi:10.5194/amt-12-5685-2019

2018

Belegante, L., Bravo-Aranda, J. A., Freudenthaler, V., Nicolae, D., Nemuc, A., Ene, D., Alados-Arboledas, L., Amodeo, A., Pappalardo, G., D'Amico, G., Amato, F., Engelmann, R., Baars, H., Wandinger, U., Papayannis, A., Kokkalis, P., Pereira, S. N.

Experimental techniques for the calibration of lidar depolarization channels in EARLINET

Atmos. Meas. Tech., **11**, 1119-1141 p.

doi:10.5194/amt-11-1119-2018

Bohlmann, S., Baars, H., Radenz, M., Engelmann, R., Macke, A.

Ship-borne aerosol profiling with lidar over the Atlantic Ocean: From pure marine conditions to complex dust-smoke mixtures

Atmos. Chem. Phys., **18**, 9661-9679 p.

doi:10.5194/acp-18-9661-2018

Córdoba-Jabonero, C., Sicard, M., Ansmann, A., del Águila, A., Baars, H.

Separation of the optical and mass features of particle components in different aerosol mixtures by using POLIPHON retrievals in synergy with continuous polarized Micro-Pulse Lidar (P-MPL) measurements

Atmos. Meas. Tech., **11**, 4775-4795 p.

doi:10.5194/amt-11-4775-2018

Dai, G., Althausen, D., Hofer, J., Engelmann, R., Seifert, P., Bühl, J., Mamouri, R.-E., Wu, S., Ansmann, A.

Calibration of Raman lidar water vapor profiles by means of AERONET photometer observations and GDAS meteorological data

Atmos. Meas. Tech., **11**, 2735-2748 p.

doi:10.5194/amt-11-2735-2018

Haarig, M., Ansmann, A., Baars, H., Jimenez, C., Veselovskii, I., Engelmann, R., Althausen, D.

Depolarization and lidar ratios at 355, 532, and 1064 nm and microphysical properties of aged tropospheric and stratospheric Canadian wildfire smoke

Atmos. Chem. Phys., **18**, 11847-11861 p.

doi:10.5194/acp-18-11847-2018

Haarig, M.

Triple-wavelength polarization lidar observations at Barbados during SALTRACE : Characterization of the optical properties of dust after long-range transport and of pure marine aerosol

Ph. D., University of Leipzig, Faculty of Physics and Earth Sciences, 126 pp.

Mewes, S.

Characterization of aerosol properties by lidar measurements at Haifa, Israel

M.Sc., University of Leipzig, Faculty of Physics and Earth Sciences, ? pp.

Urbanneck, C.

Retrieval of aerosol optical and microphysical properties in Cyprus during A-LIFE and CyCARE by lidar and closure studies with airborne in-situ measurements - Towards aerosol-cloud interaction investigations

M.Sc., University of Leipzig, Faculty of Physics and Earth Sciences, ? pp.

2017

Ansmann, A., Rittmeister, F., Engelmann, R., Basart, S., Benedetti, A., Spyrou, C., Remy, S., Skupin, A., Baars, H., Seifert, P., Senf, F., Kanitz, T.

Profiling of Saharan dust from the Caribbean to West Africa – Part 2: Shipborne lidar measurements versus forecasts

Atmos. Chem. Phys., **17**, 14987-15006 p.

doi:10.5194/acp-17-14987-2017

Baars, H., Seifert, P., Engelmann, R., Wandinger, U.

Target categorization of aerosol and clouds by continuous multiwavelength-polarization lidar measurements

Atmos. Meas. Tech., **10**, 3175-3201 p.

doi:10.5194/amt-10-3175-2017

Filioglou, M., Nikandrova, A., Niemelä, S., Baars, H., Mielonen, T., Leskinen, A., Brus, D., Romakkaniemi, S., Giannakaki, E., Komppula, M.

Profiling water vapor mixing ratios in Finland by means of a Raman lidar, a satellite and a model

Atmos. Meas. Tech., **10**, 4303-4316 p.

doi:10.5194/amt-10-4303-2017

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